UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

February 12, 2002

MEMORANDUM

SUBJECT: Excavation Work Plan for Buffalo Compressor Station
Williams Gas Pipelines Central, Inc., Buffalo, Oklahoma

FROM: Lou Roberts, Regional PCB Coordinator
Toxics Enforcement Section (6EN-AT)

TO: Karen McCormick, On-Scene Coordinator
Superfund Division (6SF-R)

My comments regarding the aforementioned document are as follows:

1) Section 2.0 Past Characterization and Cleanup Activities

A summary of the following reports was provided instead of the reports:

a) initial site characterization report dated December 2, 1994 (ERM-Rocky Mountain)
b) site characterization report dated April 6, 1995 (Burlington Environmental)
c) concrete decontamination report dated July 1995 (SECOR International, Inc.)
d) site characterization report dated 2000 (Terracon)

The ERM-Rocky Mountain summary does not identify that an initial wipe sample in a concrete pipe chase indicated a concentration of 4,300 ug/100 cm^2.
(See attached November 19, 1994-letter to EPA from SECOR International, Inc.)

I'm assuming that the samples taken up-gradient of the site to determine background levels did not identify any PCBs.

I'm assuming that the samples taken down-gradient of the site to determine possible PCB migration did not identify any PCBs.

I'm assuming that the samples taken down-gradient of the site included all surface run-off drainage pathways?

I am unable to identify that areas below air receiver discharge vents were sampled?

I am unable to identify the sampling methodology used for these sampling events (i.e., random, composite, hexagonal or square grid [size and number of samples collected]. Therefore, I'm not able to determine if the site has been adequately characterized.

Sampling and decontamination activities on historically PCB contaminated concrete conducted by SECOR International, Inc. and Terracon are considered invalid by the EPA PCB Program since the methods employed were not in accordance with the PCB regulations. Specifically, the sampling method used to test for PCBs was wipe sampling. Since concrete is a porous surface, wipe sampling on a PCB spill that is greater than 72 hours old is inappropriate. Wipe sampling would not identify the concentration of PCBs that would have penetrated the concrete to any depth.

See attached copy of a recommended procedure for sampling concrete in the field.

Terracon which did a site characterization in 2000 should have used the PCB Regulations (i.e., the Mega Rule) promulgated in 1998 which specifically included natural gas pipeline systems. The characterization of pipeline systems is based on the concentration of PCBs in the organic liquids. If there is no liquids present, then the pipeline system should be characterized in accordance with 40 C.F.R. § 761, Subpart M. I can not determine that Terracon followed Subpart M.

Note: If the disposal option does not specifically require characterization (i.e., pipe less than 4 inches in diameter or disposal options for PCBs at greater than 500 ppm), there is no need to characterize the pipe by testing. There is no specific requirement to test, but there is a requirement to dispose of the pipe in accordance with the applicable regulations.

2) Section 3.0 Objectives

Identifies the clean-up level in soil as 10 ppm.

Is this site a High Occupancy or Low Occupancy Area?
Is the future land use of this site going to be a High Occupancy or Low Occupancy Area?

See 40 CFR § 761.3 for definitions of High Occupancy Area and Low Occupancy Area.

See 40 CFR § 761.61(a)(4) for clean-up levels involving High or Low Occupancy Area? (Note: High Occupancy Area requires clean-up to less than 1 ppm in soil or to less than 10 ppm with a cap; Low Occupancy Area requires clean-up to less than 25 ppm in soil or to less than 100 ppm with a cap).

3) Section 4.2 Revisions to the Work Plan

Is the time frame for EPA to review any Work Plan Revisions covered in the Consent Decree?

4) Section 4.3.2 Mobilization

Identifies the construction of PCB-impacted soil stockpiling areas with the final staging/stockpile area to be determined following contractor selection.

Time frame for stockpiling soil is not identified.
Construction of stockpiling areas not discussed in this section.

Recommend following 40 CFR § 761.65(c)(9) - 180 days with controls.

5) Section 5.1.1 Surveying

Size of grid squares and number of samples to be taken not identified.

6) Section 5.1.2 Depth of Excavation

Grid size and number of samples collected from grid not identified.
Figure X not provided.

7) Section 5.1.3 Removal Volume

Identifies the verification sampling will be the previous Terracon samples taken. This Terracon report was not provided, therefore, the type of sampling done and number of samples taken is not known. Therefore, the decision as to if enough samples were taken and if this is acceptable can not be made by me.

8) Section 5.2 Clean-Up Strategies for Drain Line and Air Line Piping (Area 2)

Identifies the removal or cleaning of additional lines only if a wipe sample identifies PCB contamination in excess of 100 ug/100cm^2.

This contradicts Section 3.2 - Drain Line and Air Line Piping - where it is stated, "The objective in this area is to remove the air lines and drain lines in the air receiver or auxiliary building areas exhibited PCB concentration exceeding 10 ug/100cm^2."

Piping abandoned in place should follow 40 CFR § 761.60(b)(5).
Decontamination of piping and air lines should follow 40 CFR § 761.79(c)(5).

In addition, this Section states, "All other contaminated laterals and taps will be similarly removed and disposed of in an approved landfill if wipe sample analytical results indicate PCB concentrations in excess of 100 ug/100cm^2."

At PCB concentrations < 10 ug/100cm^2 or < 50 ppm, the pipeline is unregulated for use at § 761.30(i) and is unregulated for abandonment or disposal at § 761.60(b)(5). This pipe can be sold under § 761.20(c)(5)(ii), which allows the distribution in commerce of materials that currently meet a decontamination standard in § 761.79(b). The decontamination standard for non-porous surfaces in contact with liquid PCBs is < 10 ug/100cm^2, provided all free-flowing liquids have been removed (§ 761.79(b)(3)).

The action level should be 10 ug/100cm^2.

The Quality Assurance Project Plan correctly identifies this on Page 8 in A6 - Project/Task Description.

9) Section 5.2.1 Removal Volume

What about air testing lines greater than 2 inches in diameter?
(Note: 40 CFR § 761.79(c)(5) should be followed for testing lines greater than 4 inches in diameter.)

"If a defect is found either through air testing or visual inspection, one soil sample will be collected below the center point of each identified defect, with a maximum sampling of one sample every 100 linear feet of trenched area."

The maximum sampling of one soil sample every 100 linear feet of trenched area is not acceptable. The sentence should read, "If a defect is found either through air testing or visual inspection, one soil sample will be collected below the center point of each identified defect."

It is noted that a determination regarding pipe being free of liquids has not been made. 40 C.F.R. § 761.60(b)(5) states that prior to abandonment or disposal, all free flowing liquids must be removed from the pipe. The regulations do not specify how to remove the liquids, only that all free flowing liquids are removed prior to abandonment or disposal. Just because both ends of the pipe are dry doesn't ensure that the entire pipe is dry. The low points of the pipeline system can be located and drained or the pipe can be pigged.

10) Section 5.2.2 Wipe Sampling

Verification for soils should not be included in this section. Delete the sentence, "Final verification sampling required for any affected soils encountered will be performed in accordance with the sampling procedure as set forth in Section 8.1. In the event, composite samples are taken, sampling will be done in accordance with 40 CFR 761.130(e)."

Regarding this sentence, allowing composite sampling to be done in accordance with 40 CFR § 761.130(e) (which is allowed by the PCB Spill Cleanup Policy when a spill cleanup is initiated and/or completed with 24 to 72 hours of the spill) is a decision to be made by the On-Scene Coordinator after reviewing 40 CFR Part 761, Subpart O.

A decision could be made to allow the sampling methodology provided for in § 761.130(e). Subpart O provides for more individual samples to be taken but compositing of those individual samples up to 9 is acceptable whereas § 761.130(e) doesn't allow for compositing.

11) Section 6.0 Decontamination Procedures

Disposal options for water collected from field decontamination activities is not the same as for PCB-contaminated soil.

40 C.F.R. § 761.50(a)(2) states, "No person may process liquid PCBs into non-liquid forms to circumvent the high temperature incineration requirements of § 761.60(a)."

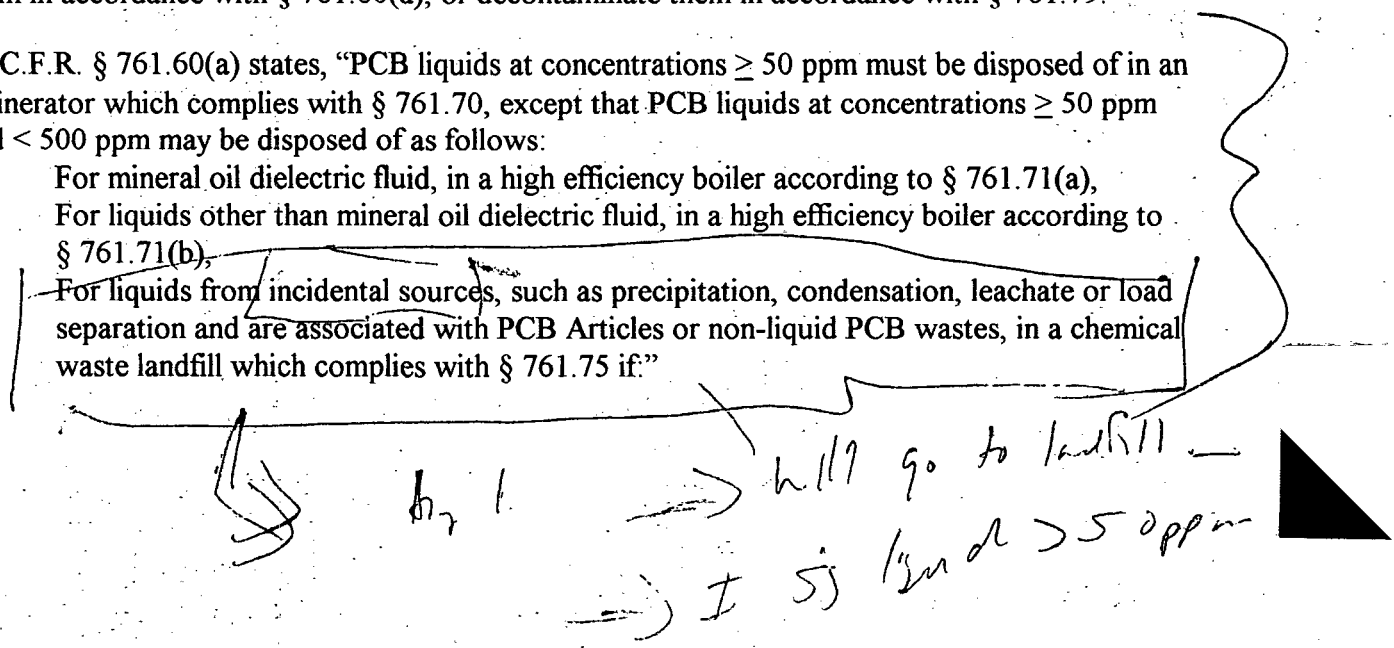
40 C.F.R. § 761.50(b)(1) states, "Any person removing PCB liquids from use must dispose of them in accordance with § 761.60(a), or decontaminate them in accordance with § 761.79."

40 C.F.R. § 761.60(a) states, "PCB liquids at concentrations ≥ 50 ppm must be disposed of in an incinerator which complies with § 761.70, except that PCB liquids at concentrations ≥ 50 ppm and < 500 ppm may be disposed of as follows:

(1) For mineral oil dielectric fluid, in a high efficiency boiler according to § 761.71(a),

(2) For liquids other than mineral oil dielectric fluid, in a high efficiency boiler according to § 761.71(b),

(3) For liquids from incidental sources, such as precipitation, condensation, leachate or load separation and are associated with PCB Articles or non-liquid PCB wastes, in a chemical waste landfill which complies with § 761.75 if:"



40 C.F.R. § 761.79(b)(1) states, "The decontamination standard for water containing PCBs is:
(i) Less than 200 ug/L (i.e., < 200 ppb PCBs) for non-contact use in a closed system where there are no releases;
(ii) For water discharge to a treatment works (as defined in § 503.9(aa)) or to navigable waters, < 3 ug/L (approximately < 3 ppb) or a PCB discharge limit included in a permit issued under section 307(b) or 402 of the Clean Water Act; or
(iii) Less than or equal to 0.5 ug/L (i.e., approximately ≤ 0.5 ppb PCBs) for unrestricted use."

12) Section 7.0 Field Quality Assurance/Quality Control (QA/QC) and Sample Identification

"The first three characters will be BUF to designate samples collected from the Greensburg site."

This isn't the Greensburg site!

13) Section 9.0 Treatment and Disposal

A transporter of PCB waste must have filed an EPA Form 7710-53, Notification of PCB Activity.

On-site treatment of soils contaminated with PCBs other than what is identified in the decontamination procedures at 40 C.F.R. § 761.79 requires an alternate disposal approval in accordance with 40 C.F.R. § 761.60(e).

14) Section 18.0 Site Clean-Up Schedule

"... the Administrative Order on Consent no later than December 31, 2001,...."

Date needs to be changed.

15) Quality Assurance Project Plan

Page 8 - Same comment as in (1). Since concrete is a porous surface, wipe sampling on a PCB spill that is greater than 72 hours old is inappropriate. Wipe sampling would not identify the concentration of PCBs that would have penetrated the concrete to any depth. Therefore, the sampling and decontamination activities performed on historically PCB contaminated concrete conducted by SECOR International, Inc. and Terracon are considered invalid by the EPA PCB Program since the methods employed were not in accordance with the PCB regulations.

Page 10 - "If two consecutive samples collected along the drain line indicate PCB concentrations below 100 ug/100cm^2, excavation in this area will be considered complete."

This wipe sample result is not appropriate in the discussion for soil. Also, the clean-up level when wipe samples are used is below 10 ug/100cm^2.

Page 13 - B1 Sampling Process Design

It is noted that the pipe in Area 2 is to be removed. This should include all pipe where wipe sampling has identified PCB concentrations greater than 10 ug/100cm^2.

This concludes my specific comments. A general comment is that Williams Gas Pipelines Central, Inc. should be following 40 C.F.R. § 761.60(b)(5) for their site characterizations.

For your information, the PCB regulations (i.e., 40 C.F.R. Part 761) can be downloaded and printed from the PCB homepage (www.epa.gov/pcb).

If you have any questions, contact me at 5-7579.

Attachments (2)